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By
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THE ETHNOBOTANY OF AUBLET'S *Histoire des Plantes de la Guiane Françoise* (1775)[1]

Mark J. Plotkin,[2] Brian M. Boom,[3] and Malorye Allison[4]

ABSTRACT

Fusée Aublet's *Histoire des Plantes de la Guiane Françoise* is best known for its contributions to plant systematics. However, that work contains significant ethnobotanical information as well, and, in fact, Aublet mentioned 124 useful plant species. Aublet's comments, translated into English, are presented along with reproductions of the original plates. These early observations qualify Aublet as a "founding father" of neotropical ethnobotany. Highlighting these useful taxa is the first step in investigating their potential for introduction into the international marketplace.

The science of ethnobotany is experiencing a renaissance. Anthropologists and botanists are displaying renewed interest in this interdisciplinary field, and institutions like the U.S. Congress, the World Health Organization, and the World Bank realize that the plants known and used by indigenous people may one day benefit all mankind. If we are to find new medicines, new crops, or new industrial raw materials we need to investigate plants employed by tribal people. Almost every tropical plant product used by industrialized society was discovered through ethnobotanical research.

Many authors (e.g., Balick, 1985; Boom, 1985; Plotkin, 1988; Prance, 1985; Schultes, 1988) have called attention to the urgent need for more ethnobotanical field research. Countless tribal societies are relinquishing various aspects of their traditional lifestyles, and information on the utility of local plants is not being passed on to the next generation.

One often-overlooked aspect of ethnobotanical research involves plants whose uses are described in ancient and contemporary literature. Ethnobotanical writings date as far back as the Code of Hammurabi, compiled almost 4,000 years ago (Schultes, 1972). Had we paid closer attention to the ancient Egyptian papyri, we might have developed antibiotics well before the 1940s and, if we had critically evaluated the Vedas of ancient India, we might have discovered reserpine well before the 1950s (Bottcher, 1964; Woodson et al., 1957). Early accounts of explorers, naturalists, missionaries, and physicians in the tropics sometimes contain interesting data on useful plants; however, much of this information cannot be cross-checked owing to a lack of illustrations or voucher specimens. The best early data from the New World tropics were assembled by Francisco Hernandez (1888), a physician sent to Mexico to study Aztec medicine in the late sixteenth century by the king of Spain. Other initial accounts include those of Sessé & Mociño (1891–1897) (Mexico), Mutis (1954) (Colombia), and Ruiz & Pavón (1794) (Peru and Chile). The earliest data on the useful plants of lowland South America are widely attributed to such scientists as von Martius (1840–1906) (Brazil), von Humboldt & Bonpland (1808–1809) (Venezuela), and Spruce (1908) (Brazil, Ecuador). Additionally, the long-overlooked Frenchman Fusée Aublet is usually thought of as a taxonomist, yet he carried out what are probably the first detailed and extensive ethnobotanical studies of South American rainforest plants.

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Aublet's *Histoire des Plantes de la Guiane Françoise* (1775) was one of the two most important eighteenth-century publications on the vegetation of the Guianas (the other was Linnaeus's *Plantae Surinamenses*, published the same year). Aublet's work was based on personal collections made from 1762 to 1764, which were probably supplemented with material collected by Amerindians and other locals (P. Grenand, pers. comm.). Aublet described 208 new genera and many new species. Howard (1983) explained the difficulties in updating names for a number of Aublet's species due to discrepancies between text and illustration and due to descriptions based on mixed collections. While Howard focused on species, Zarucchi (1984) reexamined the generic names and clarified their current status. Although both of these papers have cleared up much of the confusion regarding the taxonomy of the plants of the Guianas, they did not address the ethnobotanical aspects of Aublet's work.

Like so many of his contemporaries, Aublet did not focus purely on taxonomic botany but concerned himself also with the potential utility of the plants. He trained as an apothecary's apprentice in Spain, served in the medical service of the army commanded by Infant Don Philippe, helped prepare prescription drugs at the Charity Hospital in Paris, and worked as Botanist and first Apothecary of the Company of the Indies at Ile de France (Mauritius), where he established a garden of edible and medicinal plants. After spending nine years on Mauritius, Aublet returned to France in 1762 and sailed for French Guiana later that same year. He was sent to the New World as Apothecary-Botanist in the service of the King of France.

Aublet spent two years in French Guiana and worked with a number of native peoples. Much of his information on the utility of local plants was gathered from the Creoles, descendants of Africans who had been brought to the colony to provide slave labor. He also worked with Caribs and Galibis, coastal tribes of Cariban stock which persist to the present day. There exists some uncertainty with regard to the Coussari, Garipon, and Noirague Indians, also mentioned by Aublet. Pierre Grenand (pers. comm.), the leading authority on the Indians of French Guiana, claims that the Coussaris were a mixture of Galibis and Wayampis (a Tupian tribe that currently resides on the Oiapoque River, which forms the boundary between Brazil and French Guiana). According to Norwood (1964), the Coussaris were "virtually exterminated by Oyana-Rucuyen (Wayanas) after centuries of feuding among the islands dotting the junction of the Itany and Maroni rivers," which mark the border between French Guiana and Suriname. Grenand (pers. comm.) believes that the Garipons were comprised of fragments of many different tribes. They spoke "Lingua Gerale" and lived on the Kuripi and the lower Oiapoque. The Garipons disappeared from French Guiana by the turn of the century but survive in Brazil where they are known as the Karipuna. Aublet also mentioned the Noiragues, which he alternately described as living in French Guiana and Brazil. According to Gillin (1948), the Noiragues were of Cariban stock. As far as we can ascertain, they have completely died out.

It is clear that Fusée Aublet should be considered one of the "founding fathers" of neotropical ethnobotany. Although most botanists think of his *Histoire des Plantes de la Guiane Françoise* as a taxonomic treatise, Aublet was in fact sent to French Guiana as an *Apothecary* - Botanist. His book describes uses for 124 species from 56 different families. That he employed many of the plants himself and that he used many of the vernacular names as the bases for his Latin names seems to indicate a high regard for the botanical sophistication of his indigenous colleagues.

The translations in the present paper were made by M. Allison and they are somewhere between a direct translation and paraphrasing, the idea being to give a sense of Aublet's style. All of the commentary, except that appearing in brackets, is a translation of Aublet's original; that within brackets is of the authors. Each entry gives a reference to the page(s) in the *Histoire* where it appeared. Plates are indicated immediately after the name of the species and are located in the text close to the relevant entry. Taxonomic synonyms employed in this paper follow Howard (1983).

Anacardiaceae

Anacardium occidentale L. (p. 392)

It is useful to travelers, thanks to its fruit, which is used to quench the thirst at times when fresh water cannot be found. Different tribes derive from this fruit—in letting it ferment—a winelike liqueur which they drink.

This tree is cultivated in the gardens of the area around the mountains on Mauritius, to which it has been introduced. Some have a red fruit, some a white one.

Spondias lutea L. (p. 469)

This tree is named "Monbin" and its fruit is called "Prune de monbin."

From the pulp surrounding the pit of the fruit—

which is very acid—a very refreshing "lemonade" is made. A decoction made from its leaves is used to wash and clean ulcers.

ANNONACEAE

Annona ambotay Aublet (p. 616ff, t. 249) [Fig. 1]

This tree is called "Ambotay" by the Galibis. Its bark has a sharp and aromatic taste. They boil it down in order to obtain a residue to cure weak persons with bad ulcers. Having suffered from precisely this, I successfully used this remedy.

Annona paludosa Aublet (p. 611ff, t. 246) [Fig. 2]

The fruit is good to eat and is known as "Corossol sauvage" ("Wild corossol").

Guatteria ouregou (Aublet) Dunal [Fig. 3]

Cananga ouregou Aublet (p. 608ff, t. 244)

The Galibis call this tree "Ouregou."

The leaves and fruits have a sharp and slightly aromatic flavor when chewed.

APIACEAE

Eryngium foetidum L. (p. 284)

This plant is regarded by the inhabitants of Cayenne as a good febrifuge.

APOCYNACEAE

Ambelania acida Aublet (p. 266ff, t. 104) [Fig. 4]

This tree is called "Ambelani" and "Paraveris" by the Galibis.

The flowers, fruit, leaves, branches, and bark of the trunk contain a thick, milky sap. The fruit, although milky, is good to eat. After peeling the skin, it is soaked in water; prepared in this manner, it has an acid pleasant taste and because of its viscosity it sticks to the teeth and lips so much that the Creoles have named it "Quienbiendente," bastardizing the expression "Qui tient bien aux dents" ("which sticks well to the teeth"). They make jelly from both the peeled and unpeeled fruit. The jelly from the peeled fruit is a bit tart and refreshing, while that made from the unpeeled fruit is lightly purgative. It is prescribed here to cure dysentery.

Couma guianensis Aublet (*Suppl.* p. 39ff, t. 392) [Fig. 5]

The fruits come out of the axil while the leaves are falling; there are several together on a long peduncle, curved compressed at the top, the size of a nut with its husk. Their skin is thin and reddish. The flesh, of the same color, is juicy and a little sticky and has a very nice taste. Before ripeness it is full of a tart milky juice. It has three, four or five round but a bit flattened seeds. The Negroes bring these fruits to the markets of Cayenne, and the Créoles decorate their desserts with them. The Galibis call it "Couma," the French "Poirier" ("Pear tree"). When the milky juice is congealed, it seemed to me to become a resin similar to the ambergris. I asked Mr. Rouelle to analyze and compare it with the amber.

AQUIFOLIACEAE

Ilex guianensis (Aublet) O. Ktze. [Fig. 6]

Macoucoua guianensis Aublet (p. 88ff, t. 34)

This tree is called "Macoucou" by the Galibis who use the bark to fire their pottery.

BIGNONIACEAE

Jacaranda copaia (Aublet) D. Don [Fig. 7]

Bignonia copaia Aublet (p. 650ff, t. 265)

The inhabitants call this tree "Onguent pian" ("Yaws ointment") and the Galibis call it "Copaia." Some inhabitants are convinced it is a type of *Simarouba*; thus they use it for looseness of the bowels and dysentery. They make an infusion of the bark; it is a purgative and often causes vomiting.

The Negroes make an extract with the sap from the leaves to cover and rub into areas of the body afflicted with the disease called "pian" [Technically "pian" is yaws but in this context it probably refers to leishmaniasis. The senior author has recently recorded the use of an extract of the leaves of this species as a treatment for leishmaniasis sores by the Bushnegroes of neighboring Suriname.]

BONNETIACEAE

Caraipa parvifolia Aublet (p. 561ff, t. 223) [Fig. 8]

This tree is called "Caraipé" by the Garipons. They use the ashes of the bark mixed with a clayey soil to make their pottery.

The Creoles call this species "Manche-hache" ("Axe handle") because the wood is one of the best for making handles of axes, hatchets and other cutting tools.

BORAGINACEAE

Cordia tomentosa Lam.

Varronia martinicensis Aublet (p. 232)

This species is called "Montjoly" by the inhab-

itants of French Guiana, who use the leaves in baths and compresses to ease swelling, soothe pain, and fortify nerves.

BURSERACEAE

Protium aracouchini (Aublet) March. [Fig. 9]
Icica aracouchini Aublet (p. 343ff, t. 133)

If you make a cut in the bark of this tree or cut some branches, a yellowish, balsamic, aromatic liquid runs out. The inhabitants use it to cure wounds. They also keep some at home. The Galibis call it "Aracouchini." The Caribs perfume themselves with this balm, mixing it with Carapa [*Carapa guianensis* Aublet] oil and Rocou [*Bixa orellana* L.] starch, with which they smear the entire body, even the hair to keep off rain and insects.

Protium decandrum (Aublet) March. [Fig. 10]
Icica decandra Aublet (p. 346, t. 135)

This tree is called "Chipa" by the Galibis.

The bark of this tree gives a resinous, balsamic, whitish liquid with an odor like citronella [*Cymbopogon nardus* (L.) Rendle]. When dried, it becomes a yellow, transparent resin which one finds in rather large pieces on the bark or base of the trunk. This resin is brought by the Galibis to Cayenne where it is used in the churches in place of incense.

Protium guianense (Aublet) March. [Fig. 11]
Icica guianensis Aublet (p. 340ff, t. 131)

The Negroes suck with pleasure the substance surrounding the pit of the fruit; it has a sweet and pleasant taste.

The resinous, balsamic, bitter sap which splitting the bark or wood of this tree will make run from it, has an odor like citronella [*Cymbopogon nardus* (L.) Rendle]. Thickened and dried, it becomes a whitish or yellowish resin used in Cayenne as incense in churches. Because of this, it is known as "Bois de'encens" ("Incense wood").

Protium heptaphyllum (Aublet) March. [Fig. 12]
Icica heptaphylla Aublet (p. 337ff, t. 130)

This tree is called "Arouaou" by the Galibis, "Encens" ("Incense") by the Negroes, and "Avore de l'encen" ("Incense tree") in French.

When the bark is split or branches cut, a clear, transparent, balsamic, resinous sap runs from it; when dried, it becomes a whitish resin which some inhabitants use to perfume their dwellings.

Tetragastris altissima (Aublet) Swart. [Fig. 13]
Icica altissima Aublet (p. 342ff, t. 132)

The fruits are in the form of capsules which open in 2, 3, 4, 5, or 6 valves . . . In the interior of each capsule is a white, succulent substance . . . which . . . is sweet and pleasant to taste; the Creoles suck it with pleasure. When you nick the bark of this tree, it gives a balsamic, resinous sap.

The inhabitants call this "Cedre blanc" ("White cedar") because its wood is less red than that of the tree they call "Cedre rouge" ("Red cedar"). They claim the wood of the red cedar is more durable when used in furniture and in building frames and that pirogues and boats made with wood of this species last much longer.

CAPPARACEAE

Capparis montana (Aublet) Lemée [Fig. 14]
Voyara montana Aublet (*Suppl.* p. 26ff, t. 383)

The Garipons call this tree "Vouayara-oray-araiouva-aysseu." The seeds resemble the seeds of an orange. They are enclosed in a gelatinous pulp which is sweet and good to eat.

CARYOCARACEAE

Caryocar glabrum (Aublet) Pers. [Fig. 15]
Saouari glabra Aublet (p. 599ff, t. 240)

The tree is called "Saouari" by the people of French Guiana and the inhabitants of Cayenne.

The fruit contains a sweet juicy pulp of a greenish color and the consistency of butter. The nut is large and tasty, and one can extract a sweet oil from it similar to that which is drawn from sweet almonds [*Prunus amygdalus* Batsch].

The wood is used to manufacture canoes, large pirogues and boats at Roucou, carpenter's knees, side-beams, planks, and lumber. The fruit is sold in the markets of Cayenne. The Creoles love and cherish the nut as much as we do the walnut [*Juglans regia* L.] of Europe.

Caryocar nuciferum L. [Fig. 16]
Pekea tuberculosa Aublet (p. 597ff, t. 239)

The Garipons call this tree "Tata-youba."

This species yields a kidney-shaped nut which is covered with a reddish membrane [aril]. The nut is white and good to eat.

Caryocar villosum (Aublet) Pers. [Fig. 17]
Pekea butirosa (p. 594ff, t. 238)

The tree is called "Pekea" by the Galibis and

the Noiragues that live near the Oiapoque. It has the same name in Cayenne where it is cultivated, especially at the residence of Monsieur de la Hery.

The shell surrounds a kidney-shaped nut, covered by a reddish membrane [aril]. The nut is edible and served at the table. The exterior is used in cooking instead of butter.

During the season, one sees pirogues full of the fruit arriving at Cayenne from the Oiapoque.

The wood can also be used to build boats. I learned that it is used for this in Pará, a Portuguese city located at the mouth of the Amazon River.

CARYOPHYLLACEAE

Drymaria cordata (L.) Willd.
Holosteum cordatum L. (p. 52)

This plant is called "Mignonette" and is eaten in salads.

CELASTRACEAE

Goupia glabra Aublet (p. 296ff, t. 116) [Fig. 18]

It is called "Goupi" by the Galibis. Pirogues are made from the trunk.

Goupia tomentosa Aublet (p. 296ff)

The juice from the leaves is used to ease eye inflammations. The bark and leaves are bitter in taste.

CHRYSOBALANACEAE

Hirtella racemosa Lam.
Hirtella americana L. (p. 247ff)

This tree is called "Bois de gaulette" [sic], which is the generic name for all trees the trunk and branches of which are split and made into strips for making partition walls and wickerwork.

Licania incana Aublet (p. 119, t. 45) [Fig. 19]

This tree is called "Caligni" by the Galibis. The drupe of this tree is very popular with them—they suck the pulp.

COMBRETACEAE

Bucida buceras L. (p. 399)

This tree is known by the name "Grignon" in Cayenne. In the British Islands, it is called "Chene Français" ("French oak").

The bark is used in tanning, the wood in construction and carpentry. It is rarely attacked by worms. The inhabitants of Cayenne prefer it to all other woods for cupboards and closets.

Combretum coccineum (Aublet) Engl. & Diels [Fig. 20]
Cacoucia coccinea Aublet (p. 450ff, t. 179)

The Galibis have the habit of rubbing the muzzles of their dogs with this fruit when they are out hunting; they believe it makes their sense of smell more acute.

COMPOSITAE

Clibadium surinamense L. [Fig. 21]
Bailliera aspera Aublet (p. 804ff, t. 317)

The whites and the Negroes call this plant "Conami," the name given to any plant used to poison fish. The Galibis call it "Coutoubou." They all use it to get a great deal of fish quickly. All parts of this plant taste bitter and smell like celery [*Apium graveolens* L.], although less sharp.

COSTACEAE

Costus arabicus L. (p. 2)

The Negroes use the sap, which they squeeze from the stems, to cure gonorrhea; the sap is acidic. They also boil the stems into a decoction which they use to treat the same disease.

The Creoles use the juice of the fruit of other species to write and dye thread black. The name of this fruit is "Genipa."

CYPERACEAE

Mariscus pedunculatus (R. Br.) Koyama [Fig. 22]
Remirea maritima Aublet (p. 45ff, t. 16)

The roots have an aromatic odor rather similar to that of schoenanthe. When you put them in your mouth, they give a prickly but pleasant sensation. They are also regarded as a sweat-inducer and diuretic and are used as such when made into a tea. I have used it myself with success.

DICHAPETALACEAE

Tapura guianensis Aublet (p. 126, t. 48) [Fig. 23]

The Creoles call this bush "Bois de golette" which is the name they ordinarily use for woods they use to wicker the inside and outside walls of their houses.

DILLENIACEAE

Doliocarpus dentatus (Aublet) Standley [Fig. 24]

Tigarea dentata Aublet (p. 920ff, t. 351)

The Creoles call it "Liane rouge" ("Red vine") and it is said to be a good remedy for venereal diseases.

EBENACEAE

Diospyros guianensis (Aublet) Gürcke [Fig. 25]
Paralea guianensis Aublet (p. 576ff, t. 231)

The Galibis call it "Parala" and wash themselves with a decoction of the bark when they are feverish.

Diospyros martinii R. Ben.
Roupourea guianensis Aublet (p. 198ff)

The pulp surrounding the seeds of this fruit is sweet, yellow, and thick, and the Creoles and Coussaris suck it with pleasure. The Creoles call this species "Bois gaulette" and the Coussaris know it as "Aroupourou."

The inhabitants and the Negroes use the stems of this bush in the construction of the walls of their houses, which are made of interlaced strips in the form of wickerwork which they cover with soil mixed and kneaded with cow dung.

ELAEOCARPACEAE

Sloanea guianensis (Aublet) Benth. [Fig. 26]
Courimari guianensis Aublet (*Suppl.* p. 27ff, t. 384)

The Caribs call this tree "Courimari."

The Galibis and other peoples of French Guiana draw from the inner bark thin small fibers which they use to wrap the tobacco which they smoke, in place of a pipe. . . . They made from other parts of the tree ("arcabas"), which they make very thin, paddles they use instead of oars to navigate, rudders and canoes.

EUPHORBIACEAE

Hevea guianensis Aublet (p. 871ff, t. 335) [Fig. 27]

The tree is called "Siringa" by the Garipons and "Pao seringa" by the Portuguese of Pará.

The shells from this tree contain a white seed, surrounded by a white membrane. This seed is tasty and good to eat. It is most similar in taste to a hazelnut [*Corylus avellana* L.].

The Galibis and Garipons carefully gather the fruits of this tree. They save them and enjoy eating them. I have observed their eagerness to pick them at times when we have come across these trees in our trips; I imitated them and ate many seeds without ill effect.

One has only to slash the bark of this tree's trunk and a milky juice oozes out. When one wants to obtain a large quantity, one begins at the bottom or trunk by making a deep cut which penetrates into the wood. Then one makes an incision at the top of the trunk and finally a vertical cut which continues down to the initial incision. Such incisions direct the milky juice into a container placed at the mouth of the cut, the juice thickens, dries out and becomes a soft, reddish, elastic resin; when fresh, it takes on the shape of the tools and containers to which it is applied layer by layer and which are dried by exposure to a fire. This covering becomes more or less thick, but remains soft and flexible. If the containers are of "glaise," water is poured in to dissolve it and make it come out; if the container is of baked clay, one breaks it into little pieces; this is how the Garipons do it.

One makes solid balls with this resin and when dried they are very elastic; one can make all kinds of small tools such as boxes, bottles, boots, shoes. One can also manufacture torches and lanterns whose light is dazzling.

FLACOURTIACEAE

Homalium guianensis (Aublet) Oken [Fig. 28]
Racoubea guianensis Aublet (p. 590, t. 236)

One uses the roots to make an herbal tea to treat gonorrhea. The Creoles call this species "Mavévé," a name they give to several medicinal plants.

GENTIANACEAE

Coutoubea ramosa Aublet (p. 74ff, t. 28) [Fig. 29]

The Caribs call it "Coutoubea."

The entire plant is very bitter. It is effective in reestablishing the menstrual cycle, to cure various stomach ailments brought on by digestive problems or intestinal obstructions, and especially to kill worms.

Coutoubea spicata Aublet (p. 73ff, t. 27) [Fig. 30]

The Galibis call it *Coutoubea*. It is used for the same purposes as *C. ramosa*.

Irlbachia alata (Aublet) Maas [Fig. 31]
Lisyanth[i]us alatus Aublet (p. 204ff, t. 80)

The entire plant is bitter. It is used to clear obstructions; I have used it with good results. The species is called "Bois creux" ("Hollow wood") by the Creoles.

Irlbachia purpurascens (Aublet) Maas [Fig. 32]
Lisianth[i]us purpurascens Aublet (p. 202, t. 79)

All parts of this plant are bitter. It is used as an aperitif and to reduce fever.

Voyria rosea Aublet (p. 208ff, t. 83, fig. 1) [Fig. 33]

The Garipons eat this root cooked under coals; it appears from its taste to be very similar to a potato.

GNETACEAE

Gnetum urens (Aublet) Blume [Fig. 34]
Thoa urens Aublet (p. 874ff, t. 336)

This species is called "Thoa" by the Galibis.

The fruit is good to eat boiled or grilled. The Marays [*Penelope marail*], a type of Indian chicken, and the Hocos [*Crax alector* ?], a type of pheasant, live off this fruit which they swallow whole.

Upon cutting the bark and branches, a clear viscous liquid emerges which once dried, makes a clear rubberlike substance; often there are pieces of it sticking to the trunk and branches. When one cuts the trunk or large branches, a clear, watery transparent liquid comes gushing out and can be used in place of water. It is tasteless.

GRAMINEAE

Eleusine indica (L.) Gaertn.
Cynosurus indicus L. (p. 51)

This grass is boiled into a decoction to calm convulsions common among children. It is known in Cayenne as "Pied-de-poulé" ("Chicken foot").

Gynerium sagittatum (Aublet) Beauv.
Saccharum sagittatum Aublet (p. 50)

When chewed the stems give a sweet juice. The flowered end of the stem is used to make arrows.

GUTTIFERAE

Vismia guianensis (Aublet) Choisy [Fig. 35]
Hypericum guianensis Aublet (p. 784ff, t. 311)
Vismia latifolia (Aublet) DC. [Fig. 36]
Hypericum latifolium Aublet (p. 787ff, t. 312, fig. 1)
Vismia sessifolia (Aublet) DC. [Fig. 36]
Hypericum sessifolium Aublet (p. 787ff, t. 312, fig. 2)

These three species of trees are known to the Creoles by different names such as "Bois dartre" ("Skin disease wood"), "Bois de sang" ("Blood wood"), "Bois à la fièvre" ("Fever wood"), "Bois d'accossois," and "Bois Baptiste."

One finds varieties of each of these species, differing only in the color of the leaves or in fruit size. The bark comes off the trunk and branches easily, and is then dried. The outer skin of the bark is discarded, being useless. The second is used to cover huts. As it is resinous it does not dry out and lasts a long time.

The resin of these trees is drawn out through a cut and is a purgative, the dosage being from seven to eight drops. It is also used externally to relieve the itching caused by "dartre," a skin disease.

The leaves are boiled down and swallowed to cure intermittent fevers.

HIPPOCRATEACEAE

Salacia sp. [Fig. 37]
Tampoa guianensis Aublet (*Suppl.* p. 35ff, t. 388)

The wood of this tree is used in the construction of the buildings in this district. It is called "Bois portugais" ("Portuguese wood") by the Negroes.

LAURACEAE

Aniba guianensis Aublet (p. 327ff, t. 126) [Fig. 38]

This tree is called "Bois de cedre" ("Cedar wood") by the inhabitants of Comte de Gene. The tree's wood is used to make pirogues. They claim that the trunk can be used to make masts for ships.

Ocotea guianensis Aublet (p. 781ff, t. 310) [Fig. 39]

The Garipons call it "Ajou-hou-ha." The leaves are used in compresses to drain tumors and swollen glands.

LECYTHIDACEAE

Couratari guianensis Aublet (p. 724ff, t. 290) [Fig. 40]

The Galibis call this tree "Couratari" and the Negroes call it "Maou" and "Balata blanc" ("White balata").

The Galibis and the other tribes of French Guiana use the bark of this tree, which they cut into wide strips to make a ring-shaped rope placed around the trunk of large trees. By putting themselves between the tree trunk and the rope they are able to climb to the top.

Eschweilera grandiflora (Aublet) Sandwith [Figs. 41, 42]
Lecythis grandiflora (p. 721ff, tt. 283, 284)

The Caribs call it "Canari makaque" and in

French it is known as "Marmite de singe" ("Monkey's cooking pot"). The seeds are very good to eat.

Eschweilera sp. [Fig. 43]
Lecythis zabucajo Aublet (p. 718ff, t. 288)

The Portuguese who work with a lathe make boxes and other little items with the pod.

The seeds of the fruit are edible; they are sweet, delicate, and preferable to European almonds [*Prunus amygdalus* Batsch].

Birds and monkeys live off it; this is probably why the Creoles of Cayenne call the fruits of the different species "Canari makaque" or "Marmite de singe" ("Monkey's cooking pot").

In Brazil they extract an oil from it which they value.

The bark of this tree is used by the Indians to make suspenders and to tie loads together.

Gustavia augusta L. [Fig. 44]
Pirigara tetrapetala Aublet (p. 487ff, t. 192)

This tree is called "Pirigamepé" and "Caripa" by the Caribs and the Galibis and "Bois puant" ("Smelly wood") by the other inhabitants because of its fetid odor, which remains for a very long time after it has been cut and which becomes even stronger when it is shaved or dampened. . . . It is used to make hoops.

LEGUMINOSAE

Bocoa prouacensis Aublet (*Suppl.* p. 38ff)

The inhabitants of Kaw call this tree "Bois boco." They believe that the heart of this wood would be very suitable for making pulleys for vessels.

Copaifera officinalis L. (p. 399ff)

The inhabitants of Kaw pierce the trunk of this tree and, using a bottle or "coui," catch the balm that runs from it in abundance. This balm is called "Baume of Copahu."

Dipteryx odorata (Aublet) Willd. [Fig. 45]
Coumarouna odorata Aublet (p. 740ff, t. 296)

The Galibis and the Garipons call this tree "Coumarou."

The Creoles use the bark and the wood for the same purposes as one uses "Gaiac" [Lignum-vitae, *Guaiacum officinale* L.] and they call this species "Gaiac" as well.

Eperua falcata Aublet (p. 369, t. 142) [Fig. 46]

This tree is called "Vovapa-tabaca" by the Galibis and the fruit is called "Eperu" which means "saber" in their language. The Creoles call it "Pois sabre" ("Saber pea").

The wood is oily. It is said to be good for resisting water for a long time, whether in a vase or in the earth. The Negroes use the wood to make axe handles.

Inga bourgoni (Aublet) DC. [Fig. 47]
Mimosa bourgoni Aublet (p. 941ff, t. 358)

This tree is called "Inga" by the Noiragues, a tribe in French Guiana. It is known to the inhabitants of Aroura as "Paletuvier sauvage" ("Wild mangrove") and as "Bourgoni."

The bark is bitter and astringent. The sap is mixed with smoke to dye linen and to give the color of ebony to their clubs.

Lonchocarpus rufescens Benth. [Fig. 48]
Robinia nicou Aublet (p. 771ff, t. 308)

The Galibis call this vine "Nicou" and the others know it as "Liane a enivrer les poissons" ("Fish poison vine"). They tie bundles of the freshly cut dry stalks together and use them to stir up streams. This causes a paralysis among the fish which promptly come to the surface and remain there immobilized.

Macrolobium bifolium (Aublet) Pers. [Fig. 49]
Vouapa bifolia Aublet (p. 25, t. 7)

The tree is called "Vouapa" by the Galibis.

If you cut the wood of this tree an oily liquid runs from the incision. Splinters of this wood are ignited for use instead of torches to give light, and they are employed to make axe handles and other tools, canoes, posts, and piles. The wood is also used in the construction of houses and in woodworking. This wood is considered indestructible in water, out of water, or in the soil.

Swartzia arborescens (Aublet) Pittier [Fig. 50]
Possira arborescens Aublet (p. 934ff, t. 355)

This tree is called "Bois à flèche" ("Arrow wood") because natives arm the ends of their arrows with a piece of the wood which has been sharpened to a point.

Swartzia panacoco (Aublet) Cowan [Fig. 51]
Robinia panacoco Aublet (p. 768ff, t. 307)

The Noiragues Indians that come from Pará call this tree "Palo santo," the name given to it by the Portuguese. The Galibis call it "Anacoco" and the European inhabitants of Cayenne know it as "Bois de fer" ("Wood of steel").

One uses the bark of this tree to make herbal teas that provoke sweating. Its wood is believed to last forever. I saw partially buried pieces that had lasted, whole, for more than sixty years.

Tamarindus indica L. (p. 24)

The fruit is acidic and refreshing and is made into a drink, its pulp diluted in water. Made into preserves, it can prevent scurvy on long ocean voyages.

The wood can be used for the same purposes as that of the elm tree.

Vouacapoua americana Aublet (*Suppl.* 9ff, t. 373) [Fig. 52]

This tree is called "Vouacapou" by the Galibis.

The wood is very hard; they use it in the construction of their houses as well as to make fences and huts for the Negroes. It lasts a long time without spoiling. The heart of this wood, because of its hardness and fineness, is used to make furniture, mortars, and pestles.

LOGANIACEAE

Potalia amara Aublet (p. 394ff, t. 151) [Fig. 53]

All parts of the plant are very bitter. . . . Its leaves and green stems are used in an herbal tea to cure venereal diseases. In strong doses, this tea is a regurgitive and thus can be used as such to empty the stomach in cases of fear of having ingested manioc [*Manihot esculenta* Crantz] juice or that of another poisonous plant.

MALPIGHIACEAE

Byrsonima crassifolia (L.) HBK [Fig. 54]
Malpighia moureila Aublet (p. 459, t. 183)

The Galibis call this plant "Morelia."

Some of the inhabitants [of Cayenne and of French Guiana savannas] use the bark in an infusion to stop diarrhea. It is also referred to as a fever-reducer.

Byrsonima verbascifolia (L.) L. C. Rich. [Fig. 55]
Malpighia verbascifolia L. (p. 460, t. 184)

The Galibis call this plant "Morelia."

A decoction made from boiling its roots and stumps is used to clean ulcers and wash wounds. It guards against infection and acts as an astringent. This decoction is red in color.

MARANTACEAE

Calathea allouia (Aublet) Lindl.
Maranta allouia Aublet (p. 3ff)

The roots are lined with rather large tubers which when cooked under hot coals are good to eat.

Calathea lutea (Aublet) Schultes
Maranta lutea Aublet (p. 4)

The Indians use the stem of this plant cut into strips to make baskets of different kinds.

Ischnosiphon arouma (Aublet) Koern.
Maranta arouma Aublet (p. 3)

The Caribs also use the stems of this plant, splitting them to make baskets. They call this plant "Arouma."

Maranta arundinacea L. (p. 3)

The Carib Indians eat the root of this species after it has been cooked under coals to end intermittent fevers. The plant is cultivated near their dwellings.

Maranta humilis Aublet (p. 5)

The roots of this plant are also lined with rather large tubers which are good to eat. They too are cooked under hot coals. The Creoles call these tubers "topinambours."

MELASTOMATACEAE

Clidemia hirta (L.) D. Don var. *elegans* (Aublet) Griseb. [Fig. 56]
Melastoma elegans Aublet (p. 427ff, t. 167)

The children eat the berries, which are sweet and pleasant.

Clidemia rubra (Aublet) Mart. [Fig. 57]
Melastoma rubra Aublet (p. 416ff, t. 161)

The berries are good to eat.

Henriettea succosa (Aublet) DC. [Fig. 58]
Melastoma succosa Aublet (p. 418ff, t. 162)

The Creoles call it "Caca henriette."

The fruits are of good taste and are sought after by the inhabitants of French Guiana.

A decoction of the leaves is used to wash wounds and ulcers. This acts as vulnerary astringent.

Henriettella flavescens (Aublet) Triana [Fig. 59]
Melastoma flavescens Aublet (p. 423, t. 164)

The berries of this plant are good to eat.

Leandra agrestis (Aublet) Raddi [Fig. 60]
Melastoma agrestis Aublet (p. 425ff, t. 166)

The Creoles eat the berries, which I found sweet and pleasant.

Loreya arborescens (Aublet) DC. [Fig. 61]
Melastoma arborescens Aublet (p. 421ff, t. 163)
The berries are good to eat, with a sweet taste. They are called "Mele" by the inhabitants.

Miconia alata (Aublet) DC. [Fig. 62]
Melastoma alata Aublet (p. 410ff, t. 158)
This plant is used in a decoction of its leaves to wash old ulcers known as "malingres" by the locals.

Miconia longifolia (Aublet) DC. [Fig. 63]
Melastoma longifolia Aublet (p. 432ff, t. 170)
The Garipons call this bush "Tincta" ("Dye") and use it to dye black the fabrics that they make.

Miconia mirabilis (Aublet) L. Wms. [Fig. 64]
Fothergilia mirabilis Aublet (p. 441, t. 175)
The juice of its leaves is applied to stings inflicted by fish with spines [stingrays?].

Miconia prasina (Sw.) DC. [Fig. 65]
Melastoma laevigata Aublet (p. 412, t. 159)
The leaves are crushed and used to cure wounds inflicted by fish with spines [stingrays?].

Miconia prasina (Sw.) DC. [Fig. 66]
Melastoma parviflora Aublet (p. 433ff, t. 171)
The Garipons gave this species the Portuguese name "Tincta" ("Dye") as they use it to dye black the fabrics they make.

Rhynchanthera grandiflora (Aublet) DC. [Fig. 67]
Melastoma grandiflora Aublet (p. 414ff, t. 160)
All parts of this plant except the petals contain a viscous liquid which has a rather pleasant smell. The Creoles use an infusion of the flowers to soothe coughs and to bring about expectoration. Other parts of the plant are valued as well to treat open wounds.

Tibouchina aspera Aublet (p. 446, t. 177) [Fig. 68]
The flowers of this bush are sought after for use in teas to treat chest pains and, particularly, dry coughs.

Tococa guianensis Aublet (p. 438ff, t. 174) [Fig. 69]
This bush is called "Bois macaque" ("Macaque wood") because the monkeys eat the fruit, which different inhabitants of French Guiana like as well. The Galibis called it "Tococo." When I was traveling around the interior of the region, I used the juice of this fruit instead of ink.

Topobea parasitica Aublet (p. 476ff).
The Galibis eat the fruit and sometimes use it to give a red color to household items.

MELIACEAE

Carapa guianensis Aublet (*Suppl.* p. 32ff, t. 387) [Fig. 70]
The Galibis call this tree "Carapa" and the Garipons know it as "Y-andiroba."
This tree is found in almost all of the forests of French Guiana, especially at Kaw. They derive from the seeds of the fruit an oil called Carapa oil. The Galibis boil these seeds in water. They then take them out and leave them in piles for a number of days, then they take the shell off and crush the kernels with stones as they do with cacao or else they place them in wooden mortars and make a paste which they place in a flat stone which has been hollowed out to make a gutter and which is placed at somewhat of an incline in the hot sun. Thus the oil in the paste runs out from it and collects at the base of the gutter in a calabash put there for that purpose.
Some of the Negroes do it otherwise. They place the kernel paste in a kind of furnace which they weigh down to compress the paste and thus make it give off the oil it contains in a vase put there to collect it, the same method used to press magnoc.
This oil is thick and bitter. The Galibis and other peoples of French Guiana mix it with Rocou [*Bixa orellana* L.] and smear it on their hair and all parts of their bodies; they claim it protects them from insect bites, especially those of chiggers. Applied in this manner, this oil also protects them from water, which they are often exposed to, being always nude and inhabiting the forests of a country where the rains are so frequent and abundant.
The trunk of this tree makes great masts which are respected by sailors. I saw during my stay in Cayenne a ship being equipped with masts from this tree.

Cedrela odorata L. (p. 246)
The wood is used in the construction of houses and various kinds of boats.

Guarea guidonia (L.) Sleumer
Trichilia guara L. (p. 393)
This tree grows on the island of Cayenne and on *terra firma*. It is called "Bois bale" ("Husk

wood") due to the shape of its fruit. The sap from its bark is a violent regurgitive and purgative. A decoction of this bark produces the same results but less violently.

MENISPERMACEAE

Abuta rufescens Aublet (p. 618ff)

This bush is called "Abouta" or "Abuta" by the Garipons. It grows on the Island of Cayenne and in almost all the forests of French Guiana that I have been able to explore.

The Creoles and the inhabitants of Cayenne use the dead branches of this bush to make an infusion which they use to cure the liver obstructions to which they are so vulnerable; the usual dose is one large branch, boiled or infused in a half-liter of water. They know this bush as "White pareira brava," and it is under this name that it is transported to Europe where it is used to clear phlegm, gravel, and sand from the kidneys and the bladder.

There is also, in the same places, either at Cayenne or other parts of French Guiana, a variety of this bush in which the branches and lower leaves are covered with a reddish fuzz. The bark is brownish; the root area reddish. This variety is known in Cayenne as "Red pareira brava." One uses either one or the other.

MORACEAE

Bagassa guianensis Aublet (*Suppl.* p. 15ff, t. 376) [Fig. 71]

The Galibis call this tree "Bagasse."

The fruit of this tree is very tasty. The Creoles and the natives eat it with pleasure; even when kept a short period of time, the ripe fruit ferments and acquires a winelike, rather acid taste.

Its trunk is used to make large canoes. From it are derived the curved pieces and beams used in constructing ships. A distinction is made here between the trees which grow on the mountains and those that grow on the plains and in the swamps. They claim that the wood of the "Bacassier" of the mountains is lighter and floats and that the wood of the "Bacassier" of the swamps and plains is heavier and therefore the canoe or boat made from it will sink once filled with water, while the others will come back to the surface.

Brosimum rubescens Taub. [Fig. 72]

Ferolia guianensis Aublet (*Suppl.* p. 7ff, t. 372)

The bark of this tree is smooth and ashen; when you cut it, a milky liquid flows from it. The interior wood is hard, heavy and a beautiful red color mixed with yellow; it polishes well and resembles satin, which is why it is called satin wood. It is also called "Ferole" wood; this is the name of the former governor of Cayenne who was the first to introduce this wood into commerce.

MYRISTICACEAE

Virola sebifera Aublet (p. 904ff, t. 345) [Fig. 73]

The fruit is called "Jeajeamadou" by the Creoles. The tree is called "Voirouchi" by the natives of the Oyapoc, "Dayapa" and "Virola" by the Galibis.

When the bark is cut a red sap comes out more or less abundantly, depending on the season. This sap is bitter.

It is used in the country to cure thrush [a fungal infection of the tongue and the roof of the mouth] and to soothe the pain of dental caries by covering the tooth with some cotton soaked in this sap.

These seeds give off a yellowish substance used to make candles in the country. To do this one separates the seeds from their shell by rolling a roller on top of them, after having dried them in the sun; later, having sifted and cleaned them, they are mashed into a paste which is thrown into boiling water so that the substance can be separated from it. The substance is scooped up from the surface and hardens there when the water cools; finally it is separately melted down and passed through a sieve and from that candles are made.

This substance is bitter and cannot be applied externally because it causes inflammations.

MYRTACEAE

Campomanesia aromatica (Aublet) Griseb. [Fig. 74]

Psidium aromaticum Aublet (p. 485ff, t. 191)

The wood, branches, flowers and especially the leaves are very aromatic. With a strong odor of melisse, it has been named citronelle, which is what melisse is called in France by the inhabitants. It is used in Cayenne in baths, in the form of a decoction of its leaves and branches.

Eugenia latifolia Aublet (p. 502ff, t. 199) [Fig. 75]

The pod has an astringent taste.

NYCTAGINACEAE

Boerhavia paniculata L. C. Rich.

Boerhavia diandra Aublet (p. 4)

The root of this plant serves as an emetic and a purgative. It is called "Ipecaquana" by the inhabitants of Cayenne.

OCHNACEAE

Sauvagesia erecta L. [Fig. 76]
Sauvagesia adima Aublet (p. 251ff, t. 100, fig. a)

The Galibis call this species "Adima."

The Negroes and Creoles use the mucilaginous leaves in a dish called "Caloulou."

OLACACEAE

Minguartia guianensis Aublet (*Suppl.* p. 4ff, t. 370) [Fig. 77]

The tree is called "Minquer" by the Creoles.

The wood shavings from this tree, boiled in water, give a black dye which is good for cotton. The wood, in the Kaw region, is thought of as being uncorrodible and is most preferred for rails and other things stuck in the ground. Former inhabitants have assured me that they have never seen them rot.

Ximenia americana L. [Fig. 78]
Heymassoli spinosa Aublet (p. 325ff, t. 125)

This species is called "Heymassoli" by the Galibis.

The skin of the fruit is astringent; the hull is bitter. The pit is sweet and good to eat. The pulp is of the form and size of an olive.

PASSIFLORACEAE

Passiflora coccinea Aublet (p. 828ff, t. 324) [Fig. 79]

The ovary forms a berry with a fleshy yellow covering which is sweet and good to eat.

QUIINACEAE

Quiina guianensis Aublet (*Suppl.* p. 19ff, t. 379) [Fig. 80]

When ripe, it is a yellow smooth striped drupe, oval in shape which ends in a point in the form of a nipple, in the center of which one notices a very slight opening; under the thick skin of the berry, which is acidic and of agreeable taste, there are pyrenes which are convex toward the outside and flat where they touch each other; they are covered with a reddish silky fuzz, and each contains a little seed.

RUBIACEAE

Isertia coccinea (Aublet) J. F. Gmelin [Fig. 81]
Guettarda coccinea Aublet (p. 317, t. 123)

The pulp of this fruit is sweet and good to eat. A decoction from its leaves is used by the Creoles in compresses, baths, and showers to ease swelling.

Psychotria asiatica L. (p. 147)

This bush is used in astringent and appetite-inducing teas on Mauritius.

Psychotria officinalis (Aublet) Raeusch. [Fig. 82]
Nonatelia officinalis Aublet (p. 183, t. 70, fig. 1)

The Creoles call this plant "Azier a l'asthme" because of the positive effects they have seen when using it in a tea made from its leaves to soothe and cure this sickness.

Simira tinctoria Aublet (p. 171ff, t. 65) [Fig. 83]

This species is known as "Simira" by the Galibis.

The bark of this tree, when soaked in water, soon gives a beautiful red color; it is claimed that the bark can be used as a dye. The experiments that they have made with it in Cayenne give reason to believe that this plant could indeed be very useful in dyeing silk and cotton bright red.

Sipanea pratensis Aublet (p. 149, t. 56) [Fig. 84]

It is employed in astringent teas and against gonorrhea; it is used to wash and clean the sores.

Spermacoce hexangularis Aublet (p. 61, t. 22, fig. 8) [Fig. 85]

All species of *Spermacoce* are used in a tea by the Negroes of Madagascar as a cure for gonorrhea.

RUTACEAE

Amyris guianensis Aublet (p. 336)

This tree, when its bark is cut, gives a balsamic sap which, when dried, becomes a reddish resin smelling somewhat like citronella [*Cymbopogon nardus* (L.) Rendle]. It grows in the forests of Aroura in French Guiana.

It also grows in Mauritius, in the area of Moka. M. de la Bourdonnais, when he was at Ile de France and did not have any pitch for his squadron to use when preparing their attack on Madras, used the resin of this tree which at that time was abundant on the island; he had enough collected to tar all the ships in port.

SAPINDACEAE

Paullinia tetragona Aublet (p. 355)

This species is called "Liane quarrée" in Cayenne. The vines are soaked in water and after this

are separated into four pieces with which they make baskets of all kinds and huge hats which the Negroes who are working use to protect themselves from rain. There are other bushes with vines which are used for the same purpose.

SAPOTACEAE

Chrysophyllum cainito L. (p. 234)

This tree is called "Jaune d'oeuf" ("Egg yolk") by the inhabitants of French Guiana, who also eat the tree's fruit.

Chrysophyllum macoucou Aublet (p. 233ff, t. 92) [Fig. 86]

The Garipons call this fruit "Macoucou" and eat it with pleasure. I found it very good and more pleasant than that of the "Canite" or "Cainito" [*Chrysophyllum cainito* L.?] of the Antilles.

SCROPHULARIACEAE

Bacopa aquatica Aublet (p. 129ff, t. 49) [Fig. 87]

The inhabitants call this plant the "Herbe-aux-brulures" ("Burn herb") and claim that once applied, it cures burns in a short period of time.

Scoparia dulcis L. (p. 77)

This plant is used in the treatment of gonorrhea sores. It is very soothing. In Cayenne, it is called "Herbe a balai" ("Broom herb").

SIMAROUBACEAE

Picramnia guianensis (Aublet) Jansen-Jacobs [Fig. 88]

Tariri guianensis Aublet (*Suppl.* p. 37ff, t. 390)

The Caribs call this species "Tariri."

On the topside of the branch, above the beginning of the leaf is a small glandular part, the folioles of which when dried take on a violet color. After crushing them when green or chewing them, they place them in a piece of cotton cloth, which at first becomes green but which becomes violet after a short period of time.

STERCULIACEAE

Theobroma guianensis (Aublet) Gmelin [Fig. 89]

Cacao guianensis Aublet (p. 683ff, t. 275)

This tree is called "Cacao" by the Galibis and the Garipons. It is known as "Cacao sauvage" ("Wild cacao") in French. The seeds are rounded, pressed, white and surrounded by a leathery coating which becomes reddish as it dries. This pulp is good to eat fresh.

To preserve the cacao fruit: when the fruit is completely ripe, cut the capsule in half and empty the contents into a vat. Leave the substance for 24 hours to ferment during which time it begins to liquify and turn wine-colored. One leaves the fruit in this liqueur until their membranes turn brown indicating that the embryos are no longer living. The quality of the chocolate depends in part on the maturity of the fruit and in part the degree of fermentation. The fruits then easily separate from the substance that covers them and soon dry out.

The wine-colored liqueur is a little acidic and good to drink; placed in still and distilled, it produces a fiery liqueur that is flammable and good-tasting.

Theobroma sylvestris (Aublet) Martius [Fig. 90]

Cacao sylvestris Aublet (p. 687ff, t. 276)

The Galibis and Garipons call this tree "Cacao."

The fruits are white and covered by a coriaceous membrane that becomes reddish when dry and are good to eat.

SURIANACEAE

Suriana maritima L. (p. 472ff)

Sailors use this shrub as a broom on their ships. During my time on Mauritius, I used the ashes of this shrub to obtain alkaline salt, which took the place of soda when I had none, to make soap and vegetable salt by saturating it with cream of tartar.

TILIACEAE

Apeiba glabra Aublet (p. 541ff, t. 214) [Fig. 91]

This tree is called "Ivouyra" by the Garipons.

The Garipons and the Galibis use the wood of this tree to make fire; by quickly rubbing one round, pointed piece against another, they manage to build a fire. Because of this the Creoles call it "Bois de meche" ("Matchstick wood"). It is so light that one can carry a trunk as large as described here with only one hand.

Triumfetta lappula L. (p. 475)

This species is called "Herbe a paniers" ("Basket grass") because its stems are used to make baskets. Some inhabitants soak and otherwise prepare the plant, as one does hemp, to make a very good and beautiful thread.

VERBENACEAE

Aegiphila integrifolia (Jacq.) Jacq. (p. 64ff, t. 24) [Fig. 92]

Manabea arborescens Aublet

The wood of this tree is easily split. In Cayenne it is worked into laths to make wickerwork or trellises which form the walls of houses. They are covered with soil then made white with chalk or instead covered with a white soil common in the area. Because of this use, the inhabitants have named this tree "Bois de golette."

Conclusion

Aublet recorded data that continue to be "rediscovered" by modern botanists. The medicinal properties of *Virola* and *Vismia* have recently been noted by several ethnobotanists (Plotkin, 1988; Schultes, 1988) who believe that these species harbor great potential for modern medicine. Aublet was the first to note the edibility of *Hevea* seeds—something Schultes recorded in the Colombian Amazon almost 200 years later. Aublet also wrote about the high-quality nuts and edible oils of the species of *Caryocar*, the potential utility of which was highlighted in the 1975 report by the National Academy of Sciences entitled *Underexploited Economic Plants with Promising Economic Potential.*

It is, however, a bit disheartening to consider how few of Aublet's species have become economically important 200 years after the Frenchman first described their utility. Only cashew (*Anacardium occidentale*) and natural rubber (*Hevea guianensis*) are major commodities in the global marketplace. Why so few? We believe that the lack of economically valuable species to come out of French Guiana and the tropics as a whole is probably due to the lack of research on the development of new medicinal/industrial/agricultural species. Europe (including the Mediterranean basin), with a flora only several times that of French Guiana, has already given the world sage (*Salvia officinalis* L.), thyme (*Thymus vulgaris* L.), oregano (*Origanum vulgare* L.), parsley (*Petroselinum crispeum* (Mill.) Nym. ex A. W. Hill), mint (*Mentha spicata* (L.) Hudson), barley (*Hordeum vulgare* L.), oats (*Avena sativa* L.), figs (*Ficus carica* L.), hops (*Humulus lupulus* L.), pomegranates (*Punica granatum* L.), leeks (*Allium porrum* L.), rosemary (*Rosmarinus officinalis* L.), artichokes (*Cynara scolymus* L.), garlic (*Allium sativum* L.), cabbage (*Brassica oleracea* L.), horseradish (*Armoracia rusticana* Gaertn., Mey. & Scherb.), fennel (*Foeniculum vulgare* Mill.), saffron (*Crocus sativus* L.), marjoram (*Origanum majorana* L.), basil (*Ocimum basilicum* L.), beets (*Beta vulgaris* L.), belladona (*Atropa belladonna* L.), foxglove (*Digitalis purpurea* L.), and colchicine (*Colchicum autumnale* L.). Aublet described 34 edible species and 40 medicinal species from French Guiana, yet not one has made it into the international marketplace. Assuming that temperate floras are not inherently more "useful" than tropical ones, may we not one day use Aublet's book to find a novel medicinal compound or a new food crop?

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Courimari guianensis Aublet (= *Sloanea guianensis* (Aublet) Benth., ELAEOCARPACEAE)
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Hypericum sessifolium Aublet (= *Vismia sessifolia* (Aublet) DC., GUTTIFERAE)
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Icica guianensis Aublet (= *Protium guianense* (Aublet) March., BURSERACEAE)
Icica heptaphylla Aublet (= *Protium heptaphyllum* (Aublet) March., BURSERACEAE)
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Lecythis zabucajo Aublet (= *Eschweilera sp.*, LECYTHIDACEAE)
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"Lisyanthus" purpurascens Aublet (= *Irlbachia purpurascens* (Aublet) Maas, GENTIANACEAE)
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Maranta arouma Aublet (= *Ischnosiphon arouma* (Aublet) Koern., MARANTACEAE)
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Melastoma arborescens Aublet (= *Loreya arborescens* (Aublet) DC., MELASTOMATACEAE)
Melastoma elegans Aublet (= *Clidemia hirta* (L.) D. Don var. *elegans* (Aublet) Griseb., MELASTOMATACEAE)
Melastoma flavescens Aublet (= *Henriettella flavescens* (Aublet) Triana, MELASTOMATACEAE)
Melastoma grandiflora Aublet (= *Rhynchanthera grandiflora* (Aublet) DC., MELASTOMATACEAE)
Melastoma laevigata Aublet (= *Miconia prasina* (Sw.) DC., MELASTOMATACEAE)

Melastoma longifolia Aublet (= *Miconia longifolia* (Aublet) DC., MELASTOMATACEAE)
Melastoma parviflora Aublet (= *Miconia prasina* (Sw.) DC., MELASTOMATACEAE)
Melastoma rubra Aublet (= *Clidemia rubra* (Aublet Mart., MELASTOMATACEAE)
Melastoma succosa Aublet (= *Henriettea succosa* (Aublet) DC., MELASTOMATACEAE)
Mimosa bourgoni Aublet (= *Inga bourgoni* (Aublet) DC., LEGUMINOSAE)
Minguartia guianensis Aublet (OLACACEAE)
Nonatelia officinalis Aublet (= *Psychotria officinalis* (Aublet) Raeusch., RUBIACEAE)
Ocotea guianensis Aublet (LAURACEAE)
Pacouria guianensis Aublet (APOCYNACEAE)
Paralea guianensis Aublet (= *Diospyros guianensis* (Aublet) Gurcke, EBENACEAE)
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Pirigara tetrapetala Aublet (= *Gustavia augusta* L., LECYTHIDACEAE)
Possira arborescens Aublet (= *Swartzia arborescens* (Aublet) Pittier, LEGUMINOSAE)
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Robinia nicon Aublet (= *Lonchocarpus rotescens* (Aublet) Willd., LEGUMINOSAE)
Robinia panacoca Aublet (= *Swartzia panacoco* (Aublet) Cowan, LEGUMINOSAE)
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Sauvagesia admia Aublet (= *Sauvagesia erecta* L., OCHNACEAE)
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Tapura guianensis Aublet (DICHAPETALACEAE)
Tariri guianensis Aublet (= *Picramnia guianensis* (Aublet) Jansen-Jacobs, SIMAROUBACEAE)
Thoa urens Aublet (= *Gnetum urens* (Aublet) Blume, GNETACEAE)
Tibouchina aspera Aublet (MELASTOMATACEAE)
Tococa guianensis Aublet (MELASTOMATACEAE)
Topobea parasitica Aublet (MELASTOMATACEAE)
Trichilia guara L. (= *Guarea guidonia* (L.) Sleumer, MELIACEAE)
Triumfetta lappula L. (TILIACEAE)
Varronia martinicensis Aublet (= *Cordia tomentosa* Lam. ex R. & S., BORAGINACEAE)
Virola sebifera Aublet (MYRISTICACEAE)
Vouacapoua americana Aublet (LEGUMINOSAE)
Vouapa bifolia Aublet (= *Macrolobium bifolium* (Aublet) Pers., (LEGUMINOSAE)
Voyara montana Aublet (= *Capparis montana* (Aublet) Lemée, CAPPARACEAE)
Voyria rosea Aublet (GENTIANACEAE)

FIGURE 1. *Annona ambotay* Aublet.

FIGURE 2. *Annona paludosa* Aublet.

FIGURE 3. *Guatteria ouregou* (Aublet) Dunal.

FIGURE 4. *Ambelania acida* Aublet.

FIGURE 5. *Couma guianensis* Aublet.

FIGURE 6. *Ilex guianensis* (Aublet) O. Ktze.

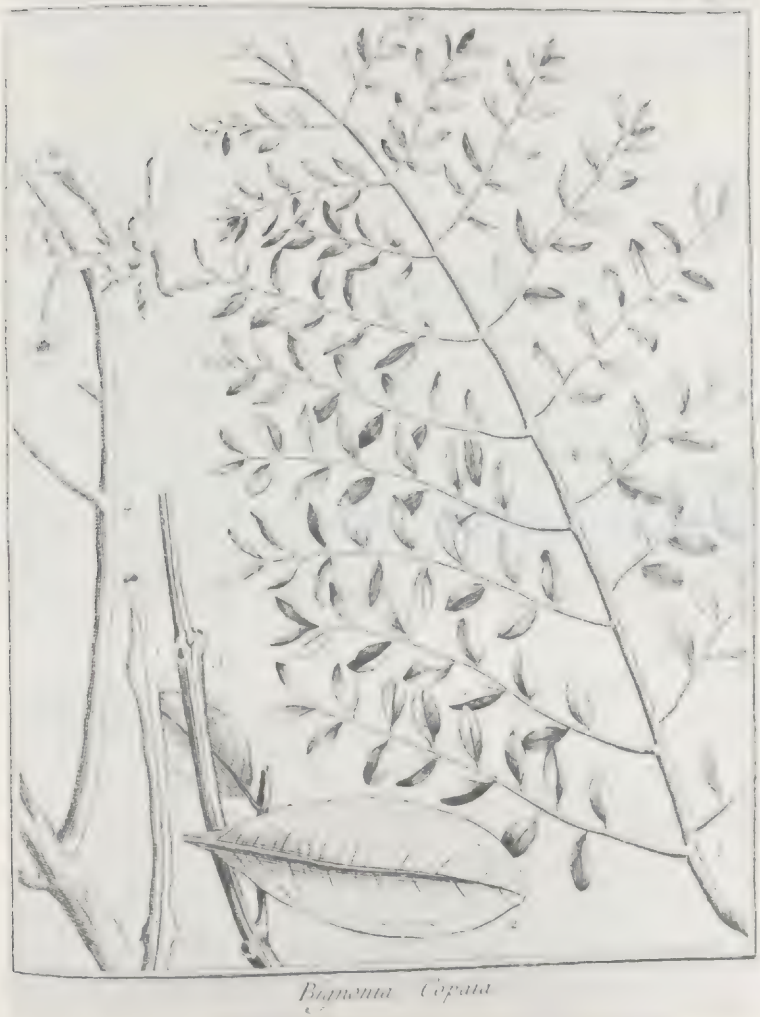

FIGURE 7. *Jacaranda copaia* (Aublet) D. Don.

FIGURE 8. *Caraipa parvifolia* Aublet.

FIGURE 9. *Protium aracouchini* (Aublet) March.

FIGURE 10. *Protium decandrum* (Aublet) March.

FIGURE 11. *Protium guianense* (Aublet) March.

FIGURE 12. *Protium heptaphyllum* (Aublet) March.

FIGURE 13. *Tetragastris altissima* (Aublet) Swart.

FIGURE 14. *Capparis montana* (Aublet) Lemée.

FIGURE 15. *Caryocar glabrum* (Aublet) Pers.

FIGURE 16. *Caryocar nuciferum* L.

FIGURE 17. *Caryocar villosum* (Aublet) Pers.

FIGURE 18. *Goupia glabra* Aublet.

FIGURE 19. *Licania incana* Aublet.

FIGURE 20. *Combretum coccineum* (Aublet) Engl. & Diels.

FIGURE 21. *Clibadium surinamense* L.

FIGURE 22. *Mariscus pedunculatus* (R. Br.) Koyama.

FIGURE 23. *Tapura guianensis* Aublet.

FIGURE 24. *Doliocarpus dentatus* (Aublet) Standley.

FIGURE 25. *Diospyros guianensis* (Aublet) Gürcke.

FIGURE 26. *Sloanea guianensis* (Aublet) Benth.

FIGURE 27. *Hevea guianensis* Aublet.

FIGURE 28. *Homalium guianensis* (Aublet) Oken.

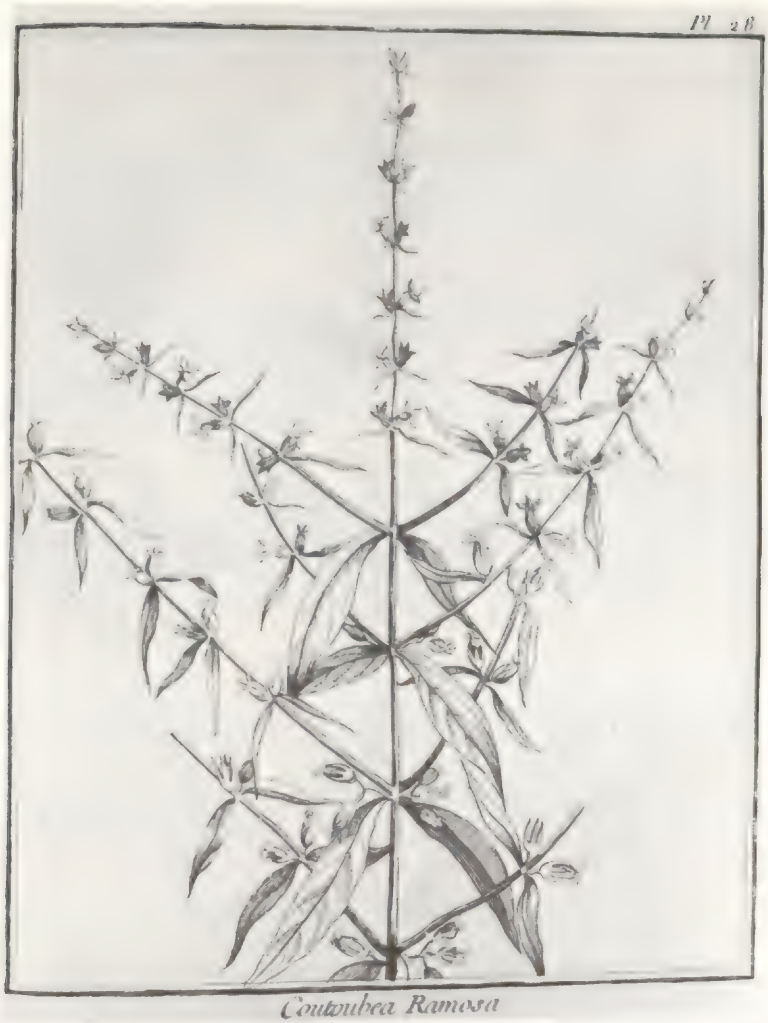

FIGURE 29. *Coutoubea ramosa* Aublet.

FIGURE 30. *Coutoubea spicata* Aublet.

FIGURE 31. *Irlbachia alata* (Aublet) Maas.

FIGURE 32. *Irlbachia purpurascens* (Aublet) Maas.

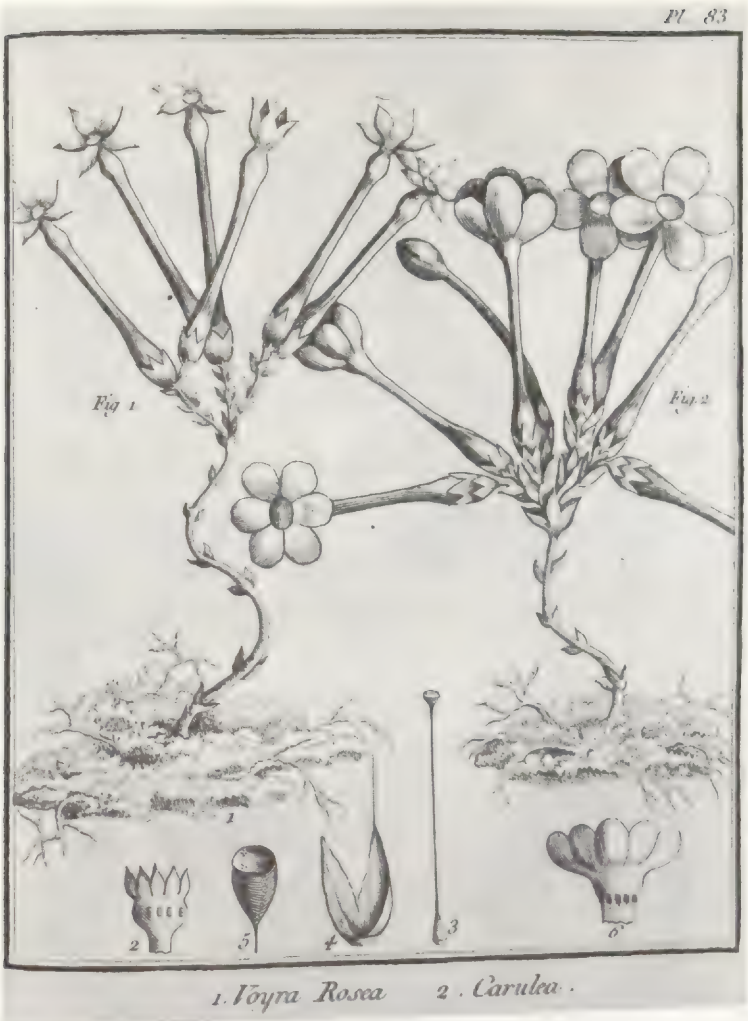

FIGURE 33. *Voyria rosea* Aublet.

FIGURE 34. *Gnetum urens* (Aublet) Blume.

FIGURE 35. *Vismia guianensis* (Aublet) Choisy.

FIGURE 36. *Vismia latifolia* (Aublet) DC. and *Vismia sessifolia* (Aublet) DC.

FIGURE 37. *Salacia* sp.

FIGURE 38. *Aniba guianensis* Aublet.

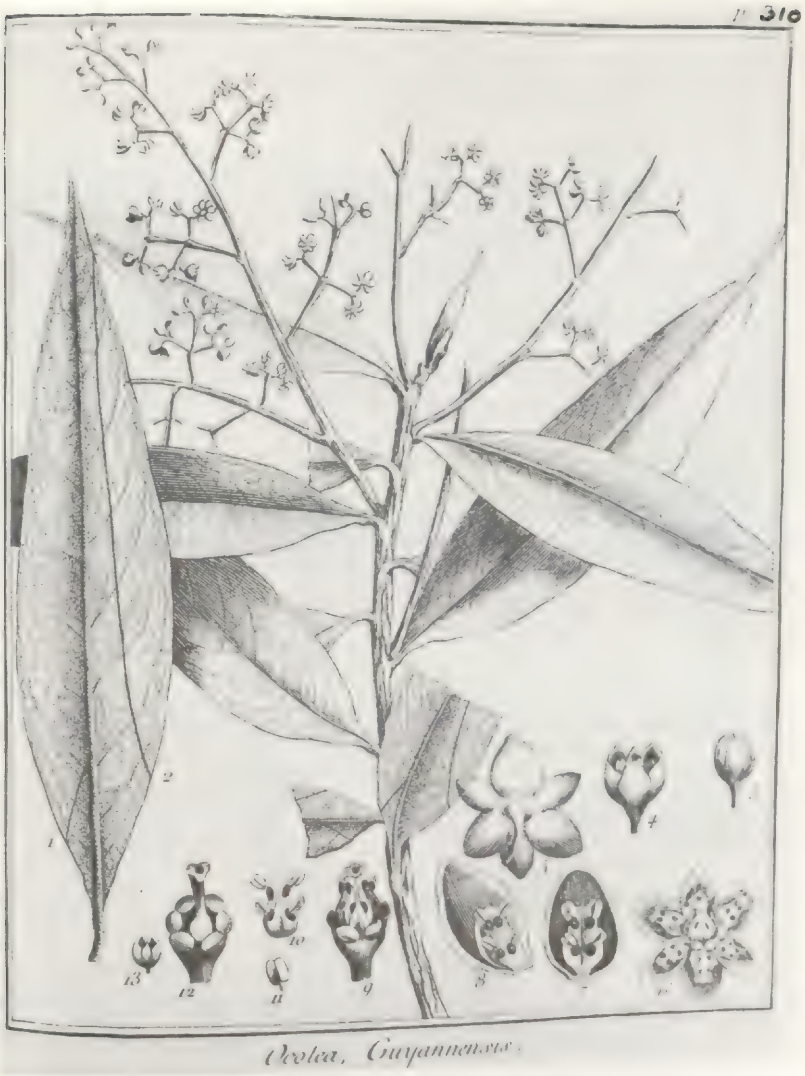

FIGURE 39. *Ocotea guianensis* Aublet.

FIGURE 40. *Couratari guianensis* Aublet.

FIGURE 41. *Eschweilera grandiflora* (Aublet) Sandwith.

FIGURE 42. *Eschweilera grandiflora* (Aublet) Sandwith.

FIGURE 43. *Eschweilera* sp.

FIGURE 44. *Gustavia augusta* L.

FIGURE 45. *Dipteryx odorata* (Aublet) Willd.

FIGURE 46. *Eperua falcata* Aublet.

FIGURE 47. *Inga bourgoni* (Aublet) DC.

FIGURE 48. *Lonchocarpus rufescens* Benth.

FIGURE 49. *Macrolobium bifolium* (Aublet) Pers.

FIGURE 50. *Swartzia arborescens* (Aublet) Pittier.

FIGURE 51. *Swartzia panacoco* (Aublet) Cowan.

FIGURE 52. *Vouacapoua americana* Aublet.

FIGURE 53. *Potalia amara* Aublet.

FIGURE 54. *Byrsonima crassifolia* (L.) HBK.

FIGURE 55. *Byrsonima verbascifolia* (L.) L. C. Rich.

FIGURE 56. *Clidemia hirta* (L.) D. Don var. *elegans* (Aublet) Griseb.

FIGURE 57. *Clidemia rubra* (Aublet) Mart.

FIGURE 58. *Henriettea succosa* (Aublet) DC.

FIGURE 59. *Henriettella flavescens* (Aublet) Triana.

FIGURE 60. *Leandra agrestis* (Aublet) Raddi.

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FIGURE 64. *Miconia mirabilis* (Aublet) L. Wms.

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FIGURE 66. *Miconia prasina* (Sw.) DC.

FIGURE 67. *Rhynchanthera grandiflora* (Aublet) DC.

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FIGURE 69. *Tococa guianensis* Aublet.

FIGURE 70. *Carapa guianensis* Aublet.

FIGURE 71. *Bagassa guianensis* Aublet.

FIGURE 72. *Brosimum rubescens* Taub.

FIGURE 73. *Virola sebifera* Aublet.

FIGURE 74. *Campomanesia aromatica* (Aublet) Griseb.

FIGURE 75. *Eugenia latifolia* Aublet.

FIGURE 76. *Sauvagesia erecta* L.

FIGURE 77. *Minquartia guianensis* Aublet.

FIGURE 78. *Ximenia americana* L.

FIGURE 79. *Passiflora coccinea* Aublet.

FIGURE 80. *Quiina guianensis* Aublet.

FIGURE 81. *Isertia coccinea* (Aublet) J. F. Gmelin.

FIGURE 82. *Psychotria officinalis* (Aublet) Raeusch.

FIGURE 83. *Simira tinctoria* Aublet.

FIGURE 84. *Sipanea pratensis* Aublet.

FIGURE 85. *Spermacoce hexangularis* Aublet.

FIGURE 86. *Chrysophyllum macoucou* Aublet.

FIGURE 87. *Bacopa aquatica* Aublet.

FIGURE 88. *Picramnia guianensis* (Aublet) Jansen-Jacobs.

FIGURE 89. *Theobroma guianensis* (Aublet) Gmelin.

FIGURE 90. *Theobroma sylvestris* (Aublet) Martius.

FIGURE 91. *Apeiba glabra* Aublet.

FIGURE 92. *Aegiphila integrifolia* (Jacq.) Jacq..

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